1

IN THE CIRCUIT COURT

FOURTH JUDICIAL CIRCUIT, DUVAL COUNTY, FLORIDA

---oOo---

DANA RAULERSON, as Personal
Representative of the ESTATE
OF JEAN CONNOR, Deceased,

Plaintiff,

vs.   No. 95-01820-CA

R. J. REYNOLDS TOBACCO COMPANY,
etc., et al.,

Defendants.

_____/

Deposition of

WILLIAM WECKER, Ph.D.

Friday, April 4th, 1997

COPY

REPORTED BY: DANA DiBASILIO TOGNINI, CSR #10118

NOGARA REPORTING SERVICE
130 Battery Street, Suite 580
San Francisco, California 94111
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51955 9925

in HUMPHREY

INDEX

Page Number

EXAMINATION BY MR. WILNER   7

---oOo---

E X H I B I T S

(None were marked)

51955 9926

2

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1   BE IT REMEMBERED THAT, pursuant to Notice of

2   Taking Deposition and on Friday, the 4th day of April,

3   1997, commencing at the hour of 10:45 o'clock a.m.

4   thereof, at the Offices of WILLIAM WECKER, Ph.D.,

5   505 San Marin Drive, Suite 200, Novato, California,

6   94945 before me, DANA DiBASILIO TOGNINI, a Certified

7   Shorthand Reporter of the State of California,

8   personally appeared

9   WILLIAM WECKER, Ph.D.,

10   called as a witness by the Plaintiff, having been by me

11   first duly sworn, was examined and testified as

12   hereinafter set forth.

13   ---o0o---

14   APPEARANCES OF COUNSEL

15   For the Plaintiff

16   SPOHRER, WILNER, MAXWELL, MACIEJEWSKI & STANFORD
         444 East Duval Street
17   Jacksonville, Florida 32202
         By: NORWOOD S. WILNER, Attorney at Law
18   (appearing via speakerphone)

19   For the Defendants

20   JONES, DAY, REAVIS & POGUE
         North Point
21   901 Lakeside Avenue
         Cleveland, Ohio 44114
22   By: WILLIAM T. PLESEC, Attorney at Law

23

24   ---o0o---

25

3

1   MR. PLESEC: We've got Dr. Wecker here, and we

2   have the court reporter here.

3   MR. WILNER: All right.

4   MR. PLESEC: For the record, William T. Plesec

5   representing R.J. Reynolds Tobacco Company in

6   deposition of Dr. William E. Wecker in the case of

7   Connor versus R.J. Reynolds Tobacco Company. The

8   deposition we were told was going to begin at 10:00,

9   and we were told that plaintiff wanted about three

10   hours of Dr. Wecker's time. Dr. Wecker and the court

11   reporter were here at 10:00, and I'm not sure what the

12   reason for the delay is. Maybe counsel for the

13   plaintiff can explain.

14   MR. WILNER: Counsel for the plaintiff has been in

15   a pretrial hearing, which was known to all, and we

16   understood that the deposition would begin at 1:00.

17   MR. PLESEC: Yeah, 1:00 o'clock Eastern time,

18   Woody, 10:00 o'clock Pacific time.

19   MR. WILNER: Oh, fine. All right. So what it is

20   now, 10:44?

21   MR. PLESEC: Right.

22   MR. WILNER: Well, let's get going then.

23   MR. PLESEC: Let me just make a couple other

24   points. We'll try and accommodate you as best we can

25   to get you your deposition and -- but other plans have

4

51955 9928

1   been scheduled for the remainder of the day. We'll try

2   and do our best to help you out here.

3   A couple things that I ought to note: One, I

4   personally did not receive the deposition notice, which

5   was issued on April 1st, until about 11:00 p.m. on the

6   evening of April 1st. Dr. Wecker was unavailable on

7   Wednesday, April 2nd. So I wasn't able to converse

8   with him personally about the documents called for by

9   the deposition notice. I had a chance to do that

10   yesterday, and Dr. Wecker has done his best to try and

11   gather documents responsive to the notice.

12   MR. WEINER: All right.

13   MR. PLESEC: And he has materials with him today

14   in that regard.

15   We would object to the third specification of

16   the notice calling for, quote, "All materials the

17   witness expects to be introduced as evidence," end

18   quote. I'm not sure if that was really something that

19   was intended to be in the notice, but as you know,

20   counsel, it's the lawyers for the parties that are

21   going to be introducing -- and the parties -- that will

22   be introducing evidence and not the witness.

23   Dr. Wecker certainly doesn't know what is

24   intended to be introduced through him as a witness at

25   this point. His testimony, obviously, at the trial

1   will be evidence, and that's what he's prepared to talk

2   about today.

3   In any event, as Dr. Wecker was trying to

4   gather materials in response to the deposition notice,

5   he did check the materials that we have furnished to

6   you in the past, the exhibits that he had generated for

7   possible use in connection with his testimony. And he

8   did observe that there were a couple of minor

9   mathematical errors, which have now been corrected, on

10 a couple of the charts.

11   If you would like us to fax those to you

12 immediately, we can do so.

13 MR. WILNER: How many pages?

14 MR. PLESEC: We're talking about three or four

15 pages.

16 MR. WILNER: Okay. 904 --

17 MR. PLESEC: Let me get a pencil and jot that

18 down.

19   904 --

20 MR. WILNER: -- 358 --

21 MR. PLESEC: 358 --

22 MR. WILNER: -- 6889.

23 MR. PLESEC: -- 6889. Okay. We'll put those on

24 the fax to you immediately.

25 MR. WILNER: Okay. Are we ready?

1   MR. PLESEC: We can begin.

2   MR. WILNER: Okay.   Please swear the witness.

3   (Witness sworn.)

4   EXAMINATION BY MR. WILNER

5   MR. WILNER: Q.   Okay.   Are you William Wecker?

6   A.   Yes.

7   Q.   Have you been asked to testify in the case

brought by Jean Connor?

8   A.   Not yet.

9   Q.   Have you been contacted and had discussions

about the possibility that you might testify?

10   A.   Yes.

11   Q.   Have you done any calculations or computations

in preparation for that testimony?

12   A.   Yes.

13   Q.   The computations and calculations have

concerned or been operations on a data set possessed by

you of CPS-II data?

14   A.   Yes.

15   Q.   Have you used any other data sets other than

the CPS-II data?

16   A.   Go ahead.

17   Q.   Have you used any other data sets?

18   A.   I haven't used any other data sets, but from

19   time to time I used numbers, for example, out of the

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1   Surgeon General report. And maybe the easiest way to

2   explain that to you is as we go through my materials

3   we'll be able to tell that.

4   Q. The CPS-II data that you used is a data set

5   they supplied to you through the American Cancer

6   Society?

7   A. Yes.

8   Q. Does it include both male and female

9   respondents to the questionnaire?

10   A. Yes.

11   MR. PLESEC: Are you still there?

12   MR. WILNER: (No response.)

13   (Telephone disconnection.)

14   MR. WILNER: Hello?

15   MR. PLESEC: Hello.

16   MR. WILNER: Okay. Are we back on?

17   MR. PLESEC: Yes.

18   MR. WILNER: Okay. I have some materials that I

19   think were created by you that have been forwarded to

20   me through the legal process. And one such paper is

21   entitled, "Lifestyle Choices That Increase Mortality

22   Risks; Eating and Drinking Choices," does that sound

23   familiar?

24   A. Yes.

25   Q. And it has a series of kind of little checked

8

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51955 9932

1   boxes and some various descriptions of activities like

2   "Eat more fried foods.   Eat more high-fat foods."

3   Do you have that in front of you?

4   A.   I do.

5   Q.   Do you generate that yourself?

6   A.   Yes.

7   Q.   Do the categories that you have listed here,

8   like eat more fried foods and eat more high-fat foods,

9   did you do computations about these types of categories

10   from the 85-II database?

11   A.   Yes.

12   Q.   And beginning with the eat more fried foods,

13   could you tell me what field in the database you used

14   and what codes you felt were suggestive of eating more

15   fried foods?

16   A.   Just a moment.   Do you have a copy of either

17   the male or female questionnaire?

18   Q.   Yes, I have the '85 code book for males.

19   A.   That's not the questionnaire.

20   Q.   I have the questionnaire as well.

21   A.   Okay.   I'm looking at a copy of the

22   questionnaire for men, and there is a diet section that

23   begins on the third page.

24   Q.   Yes, I'll get that in a minute.   But you

25   needed to use the code book to do work from the actual

<< NOGARA REPORTING SERVICE >>

1   CPS data, right?

2   A.   Yes, but there is a correspondence between the

3   questionnaire and the CPS data, and it happens that I

4   have in front of me the questionnaire and I don't have

5   the code book.

6   Q.   All right.   You don't have the code book.   All

7   right.   Just a minute.

8   Okay.   I have the questionnaire.

9   A.   You'll find the third page where the diet

10   section begins.

11   Q.   Okay.

12   A.   And about the middle of the left-hand side

13   column there is a box to check that says, "Do not eat

14   fried foods."

15   Q.   Yes, I see that.

16   A.   If you check that box, you're in one category.

17   And if you don't check the box, you're in the eat fried

18   foods category.   That information is then transcribed

19   onto a computer file, but I think it's easier to

20   explain by looking at the questionnaire as the people

21   fill it out.

22   Q.   Yes.   Well, I would rather go directly to the

23   computer file when you have the ability to do that.

24   But do you then exclude the people who do not

25   code that section one way or another?

51955 9934

1   A. If they --

2   Q. Do you recall the coding format for that box?

3   A. I don't have the format, and I don't recall

4   it. But what I do is, if they are indicated as

5   checking that box, they are in one category. And

6   everybody else is in the other category.

7   Q. Okay. Let me get this straight. Okay. I'm

8   reading from the code book. On column 200 the question

9   is asked, "Do you eat fried foods?" And the answer is,

10 "2, never. Blank, if box is not checked."

11   So your two populations are the ones who

12 checked 2 and the ones who checked nothing and they

13 are coded as blank, right?

14   A. Well, that sounds right from what you say over

15 the phone, and I would be willing to bet you're right.

16 But I'm really not able to tell you because I don't

17 have that thing in front of me.

18   Q. Okay.

19   A. But I think there is very little doubt that

20 you have found the correspondence between the

21 questionnaire and the data.

22   Q. Now, how do you define your two populations

23 between smokers and never smokers?

24   A. Current cigarette smokers and never smokers.

25   Q. Let's try to make that as specific as we can

11

1   then. What question and what answer did you qualify

2   someone as a current cigarette smoker?

3   A.   Just a second.   It looks like it's -- I did

4   this a long time ago.   So I'm going on memory here, but

5   I think I see it under the habit section.   It's asking

6   if you currently smoke cigarettes.

7   Q.   Yes.

8   A.   And I'm pretty sure of this, that if it's a

9   greater than zero number in the

10   cigarettes-smoked-per-day answer to, "Do you currently

11   smoke cigarettes?"

12   Q.   Okay.   What you are saying is Question 3 under

13   habits, "If you currently smoke cigarettes, cigars or

14   pipes, fill in the information below."   And there are

15   several questions.

16   Which one of those questions, if any, do you

17   use to identify the current cigarette smoker?

18   A.   Well, I'll tell you what I think it is.   But

19   if you want me to relate it to the code, I would have

20   to check on this, but I'm pretty sure it's the

21   cigarette section for current cigarette -- under the

22   current -- Question 3:   "Do you currently smoke

23   cigarettes?"   And then the place where you can answer

24   is, "Cigarettes smoked per day."

25   Q.   Okay.   So if a person answers with greater

<< NOGARA REPORTING SERVICE >>

1   then zero, do you call them a current cigarette smoker?

2   A. That's what I believe it to be. I will check

3   that. I've done that some time ago, but that's what I

4   believe it is.

5   Q. And then who are the nonsmokers?

             A. Never smokers.

             Q. All right. That was my question, actually, I

    had to ask one or the other.

9   Is your other group the never smokers or the

10 nonsmokers?

11   A. Never smokers.

12   Q. All right. So how do you identify the never

13 smokers?

14   A. Wait a second while I read this.

15   It looks like Question 2, if you check no.

16   Q. Okay. And how many people -- did you run any

17 checks to see if anyone checked --

18   A. Excuse me.

19   Q. Did you check to see if anyone filled in a

20 "No" for No. 2 but did fill in a positive number for

21 No. 3?

22   A. I probably did at one time, but I don't

23 remember that.

24   Q. Did you develop separate columns for males and

25 females?

                                                        .13

<< NOGARA REPORTING SERVICE >>

1   A. Separate what's?

2   Q. Separate subtotals for males and females in

3   terms of how many were in never smoker and how many

4   were in current smoker?

5   A. Let me see. I'll do my best to answer that.

6   I include both males and females in the chart that

7   we've been talking about with the squares on it, but I

8   don't have them broken out separately.

9   Q. You don't have it in that chart. When you did

10   these calculations, did you break out males and

11   females?

12   A. They would have had to have been calculated

13   separately at some point, but I don't know that I have

14   that. I have -- the result that I'm using is a

15   combined result.

16   Q. Do you recall whether the populations -- the

17   male and female populations, in terms of the percentage

18   between smokers and nonsmokers or never smokers and

19   current smokers, were significantly different between

20   the sections?

21   A. What is significantly different, are you

22   asking?

23   Q. The percentage of never smokers versus

24   nonsmokers -- I'm sorry -- never smokers versus current

25   smokers.

51955 9938

14

<< NOGARA REPORTING SERVICE >>

1   A.   Percentage of never -- I don't think I did

2   that.

3   Q.   Okay. So let's go on down here, and I want

4   you to tell me what questionnaire -- now, if you're

5   only using the questionnaire, tell me what question you

6   keyed off of to divide the two populations into -- or

7   to divide the populations according to these criteria.

8   We're on "Eat more high-fat foods."

9   A.   Okay. Just a minute. Okay?

10   The diet section, Category No. 1 has a number

11   of foods. Some of them are in the high-fat category.

12   And I used the category system of Stellman, which, if

13   you will wait a minute, I will see if I can lay my

14   hands on that.

15   Okay. Stellman has a Table II on Page 146.

16   The Stellman article is from NCI, Monograph No. 67.

17   And in that table he has a category called high-fat

18   category.

19   Q.   Yes?

20   A.   And then he lists pork, franks, sausage, eggs,

21   ham, smoked meats and beef.

22   Q.   Pork, frankfurters or sausage which is one --

23   go ahead. I guess -- are you reading from Stellman or

24   are you translating to Question 1 on the questionnaire?

25   A.   I was reading Table II --

1   Q. All right.

2   A. -- of Stellman.

3   Q. All right. I follow that.

4   Now, go to Question 1 if you can, and tell me

5   what foods you used to define high-fat foods?

6   A. Okay. That's what I'm trying to do.

7   Q. I understand. You can keep going.

8   A. Okay. So then with that inspiration from

9   Stellman, I go to the questionnaire on the diet

10   section, and I start looking for items that Stellman

11   mentions. And I'm finding -- I'm going to go down that

12   list: I find pork --

13   Q. Yes?

14   A. -- ham, there is one -- you can help me out

15   here if you see them.

16   Q. I don't have Stellman in front of me, so go

17   ahead.

18   A. Pork, ham, sausage and franks. They are in

19   one category.

20   Q. Right.

21   A. Eggs --

22   Q. Eggs.

23   A. -- beef --

24   Q. What?

25   A. Beef, B-double-E-F.

16

1   Q.   All right.

2   A.   -- smoked meats is a Stellman category.

3   And I think that completes the list.

4   Q.   Okay. And each one of those would have in the

5   questionnaire a code number for how many days per week

6   the respondent ate, right?

7   A.   Yes.

8   Q.   So what do you do with the numbers?

9   A.   I add them up for each person and then take

10   the risky upper quartile.

11   Q.   So you take the upper quartile and the lower

12   quartile?

13   A.   No, the upper quartile is the risky category.

14   Q.   And the lower three quartiles are the nonrisky

15   category?

16   A.   It's everybody else, right.

17   Q.   Okay. How many were in the upper quartile?

18   A.   I don't have that number.

19   Q.   All right. Did you find that among people in

20   the upper quartile that current smokers had higher

21   all-caused mortality than never smokers?

22   A.   I don't recall looking at that specifically.

23   Q.   Did you find that among the upper quartile of

24   high-fat food eaters that smokers -- current smokers

25   had higher mortality from lung cancer than never

HUMPHREY

51955 9941

17

1   smokers?

2   A.   I'm trying to think if I ever did that check.

3   I can't think of any place where I did the calculation

4   like that, so I haven't found it one way or another.

5   Q.   Do you have an opinion in the absence of doing

6   that calculation as to whether or not that situation

7   exists, or do you not have an opinion until you do a

8   calculation?

9   A.   I couldn't have an opinion on what the

10   calculation is until I did it.

11   Q.   I don't mean to belabor this, but asking the

12   same questions for the lower risk group, the three

13   quartiles comprising the lower risk group, did you do

14   any relative risks either for all-caused mortality or

15   lung cancer, or any other disease, between never

16   smokers and current smokers?

17   MR. BLESEC: Object to the form of the question,

18   vague and ambiguous.

19   MR. WILNER: All right.   Since you object I will

20   do it the long way.

21   Q.   In the data that you that you are testifying

22   with respect to, in the population defined as the

23   low-risk group with respect to eating high-fat foods,

24   do never smokers have a lower risk of all-caused

25   mortality than current smokers?

18

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1   A.   I haven't done that calculation. Let me add

2   something: I have other charts that we're going to be

3   coming to, and I don't think -- they are certainly not

4   the same calculation, but they may be responsive to

5   your question. But rather than bring them up, I will

6   just wait until we get there.

7   Q.   Okay. So you don't have an opinion on that

8   issue because you have not done that calculation?

9   A.   I don't know what you mean by have an opinion

10   on the issue, but I certainly haven't done the

11   calculation and I can't tell you how it would come out.

12   Q.   So that was my point. Do you have an opinion

13   as to whether the all-caused mortality rate for never

14   smokers among the low-risk group that you have

15   previously defined as the lower three quartiles is or

16   is not higher than the all-caused mortality for never

17   smokers?

18   A.   No, I would just be guessing at that

19   calculation, since I haven't done it.

20   Q.   Okay. Let's go on to "Eat less high-protein,

21   low-fat meals," how is that calculated?

22   A.   This category and the next several are all

23   Stellman categories. So I do -- just in case you

24   wanted to go faster -- I go to the same place in

25   Stellman and do the same thing I just did with the

19

<< NOGARA REPORTING SERVICE >>

1   high-fat foods.

2   Q.   And since I don't have Stellman in front of me

3   just -- don't belabor it -- but tell me, is there a

4   category in Stellman which says, "Eat less

5   high-protein, low-fat meals"?

6   A.   Just a moment.   He has exactly the category,

7   "High-protein, low-fat meats."

8   Q.   Is it "meats" or "meals"?

9   A.   It says "meats."   And I'm taking the category

10 straight out of Stellman.   He says "meats"; I say

11 "meats."

12 Q.   All right.   Do you also separate these into an

13 upper quartile versus the lower three quartiles?

14 A.   Yes, same procedure.

15 Q.   Is that same procedure applied throughout this

16 list on this page as far as the upper quartile versus

17 everyone else else?

18 A.   For all the Stellman categories, yes.   And

19 that takes us down to "Coffee."

20 Q.   Okay.   Why don't you tell me about coffee?

21 A.   Well, coffee, it says right there.   It's six

22 or more cups of coffee per day.

23 Q.   So there are two groups; one does and one

24 doesn't?

25 A.   That's right.

51955 9944

20

1   Q.   And the next is two or more beers per day.

2   That's also a binary decision, separating the

3   subpopulations into two, right?

4   A.   That's correct.

5   Q.   And then the same for shots of hard liquor per

6   day; is that correct?

7   A.   That's correct.

8   Q.   How about less supplemental vitamins, how is

9   that done?

10   A.   That's separated between the group that takes

11   no vitamins and the group that takes one or more

12   vitamins.

13   Q.   We'll talk about this in a minute, but I

14   understand that you did some certain calculations by

15   summing up or by finding the number of people that had

16   a certain number of these so-called risk factors.   And

17   I say that just to help explain what my question would

18   be, but that isn't my question.

19   What I'm asking is did you do relative risks

20   for each of these categories for any cause of death

21   individually?

22   A.   I think the answer is no, but I remind you

23   again that we're going to be turning to some other

24   charts and there are some relative risks on the other

25   charts.   And whether you decide that should provoke a

51955 9945

21

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1   yes or no, I'm not sure.

2   Q. We may get to that, but let me see if I

3   understand though. You do not have and have not done a

4   calculation which expresses the relative risk of

5   premature mortality to the entire population of CPS-II,

6   or to any subgroup therein, from being in the category

7   of taking less supplemental vitamins versus taking more

8   supplemental vitamins?

         MR. PLESEC: Object to the form of the question.

         THE WITNESS: That's correct, if I've understood

11   you.

12   MR. WILNER: Q. Okay. All right. Let's go to

13   the next page. On exercise, limited or no -- "Little

14   or no exercise," how is that computed?

15   A. None and slight is in one category. And

16   moderate and heavy is in the other.

17   Q. None, slight, versus mod, heavy.

18   And again, you cannot tell me the numbers in

19   each of those groups because you do not have those

20   calculations?

21   MR. PLESEC: Excuse me, Woody, the court reporter

22   needs you to repeat that.

23   MR. WILNER: I'll ask again.

24   It says, "None, slight versus mod, heavy."

25   That was a remark that you need not transcribe since it

                                                    22

1   wasn't really a question.

2   Q.   So my question was, though, do you have

3   subtotals of the amount of people in each category for

4   never smokers versus smokers who fall into the

5   categories of little or no exercise versus moderate and

6   heavy exercise?

7   MR. PLESEC: Object to the form of the question.

8   THE WITNESS: I don't have those figures with me.

9   MR. WILNER: Q.   Have you previously calculated

10   those figures?

11   A.   They would have been in part of the arithmetic

12   to get the result that I'm interested in with this

13   page, but they would have been an intermediate

14   calculation.   I don't think I've ever actually looked

15   at that intermediate result, and it may never have even

16   been printed anywhere.   I have never seen it.

17   Q.   Okay.   How about overweight or underweight,

18   how did you perform that calculation?

19   A.   I stratified by one-inch height groups, and

20   then took the over- and underweight group as being

21   either more than 20 percent or less than 20 percent of

22   the average for their group.

23   Q.   So you went through and calculated an average

24   for each height, rounding off to the nearest inch,

25   right?

23

1   A.   No.

2   Q.   Well, you would have to go through --

3   A.   I'm not sure about the rounding off point.

4   Q.   Well, forget the rounding off.

5   You calculated an average for each height,

6   which I believe is defined in terms of the nearest inch

7   in the CPS-II questionnaire, correct?

8   A.   For each one-inch height group I calculated an

9   average weight.

10   Q.   And an average being a mean?

11   A.   That's right.

12   Q.   And then you inspected to see who was 20

13   percent arithmetically above the mean versus 20 percent

14   below?

15   A.   Either 20 percent or more above or 20 percent

16   or more below, I put them in the under- or overweight

17   category.

18   Q.   And the two categories are overweight plus

19   underweight versus everybody else, right?

20   A.   I don't call it plus. I would say "or."

21   Q.   Well, it's a union of these two sets, right?

22   A.   I think we're saying the same thing. I just

23   say "or." Either way.

24   Q.   So it's not the overweights versus the

25   underweights. It's the overweight/underweight versus

51955 9948

24

1   everybody else, right?

2   A. Right.

3   Q. Let's talk about exposure to toxic substances.
4   How that handled?

5   A. If you answer a "yes" to the exposure to toxic
6   substances question.

7   Q. A "yes" or a "no"?

8   A. "Yes."

9   Q. "Yes." Thank you.
10   Not sleeping seven to eight hours per night,
11 where is that -- how is that computed?

12   A. Well, the seven or eight hours a night is one
13 group. And the more than eight or less than seven is
14 the other group.

15   Q. Okay. So I understand that. More than eight
16 or less than seven is one group. And everybody else is
17 no; is that right? Have I got that right?

18   A. You do.

19   Q. Thank you.
20   Not going to church or temple, where is that?

21   A. There is a specific question on that. And so
22 they either answer that they do or they don't. I think
23 it's in the miscellaneous section.

24   Q. And same for participating in group
25 activities?

51955 9949

1   A.   Yes, and in the club meetings also. I think

2   they are right together in the miscellaneous section.

3   Q.   And the same with married and not high school

4   graduates?

5   A.   Yes, married versus anything else, and not

6   high school graduate versus anything else.

7   Q.   Now that ends the list on Page 2. Are there

8   others on pages that I might be missing that you have

9   done computations on that are pertinent to this case?

10   A.   No, these are the two and only two pages of

11   this particular type of calculation.

12   Q.   I see a page now that says, "Smokers make more

13   lifestyle choices that increase mortality risk." And

14   this is a chart that says, "Relative risk factor equals

15   ratio of smokers to percent of never smokers having

16   total number of risk factors" -- excuse me -- "Ratio

17   percent of smokers to percent of never smokers having

18   total number of risk factors."

19   Okay. If I pick a number of risk factors such

20   as 12 --

21   A.   Good choice.

22   Q.   Yeah, I saw you did that later.

23   So what you're trying to represent here is

24   that current smokers -- there are three times as many

25   -- not in terms of absolute numbers, but in terms of

26

<< NOGARA REPORTING SERVICE >>

1   rate -- the rate -- the likelihood of a current smoker

2   having 12 is 3 times -- 3 point whatever it is -- 3.2

3   times the likelihood of a never smoker?

4   MR. PLESEC: Object to the form of the question.

5   THE WITNESS: I think it's basically right.

6   And just in case you didn't find it.   In my

7   stack, the next chart explains I think quite well how

8   that calculation goes.

9   MR. WILNER: Q.   Okay.   I see that.   Now, attempt

10 to relate the total number of risk factors with

11 mortality, right?   Well, let me --

12 MR. PLESEC: Object to the question.

13 MR. WILNER: Q.   This chart does not say that

14 people who have 14 or more risk factors will have five

15 times the mortality, the all-caused mortality, does it?

16 That's not what your attempting to say here, is it?

17 THE WITNESS: The court reporter didn't get the

18 question and neither did I.

19 MR. WILNER: Let me keep trying.   It's kind of a

20 negative question, so I apologize that's awkward but.

21 THE REPORTER: Excuse me, Mr. Wilner, the problem

22 is that words are being cut out.

23 MR. WILNER: Just do the best you can, ma'am.

24 THE REPORTER: All right.

25 MR. WILNER: Q.   Does this chart state that the

27

1   group of people with 14 or more risk factors have a

2   relative risk of dying of five times those with no risk

3   factors? I'm not trying to mislead you because I don't

4   think it says that. Just humor me if it does.

5   A.   I don't intend to humor you, but I can explain

6   what it is.

7   Q.   Yes. Let me strike that. I think we'll

8   figure it out.

9   A.   I think you got it right.

10   Q.   I think I got it right the first time. Let's

11   not clutter it up. I'll go on.

12   My question is where -- maybe I'm missing some

13   pages -- but where have you developed risk factors for

14   either all-caused mortality or any specific disease as

15   a function of the number of these so-called, what you

16   call risk factors, period?

17   MR. PUSEC: Object to the form of the question.

18   THE WITNESS: Well I'm not the only one to call

19   these risk factors.

20   MR. WILNER: Q. I don't mean to quibble about

21   that. Let's just see if we can understand what we're

22   talking about.

23   A.   Okay.

24   Q.   Where have you developed the relative risks

25   resulting from these factors?

1   A.   I'm going to give a two-part answer: First

2   part is -- this may not be quite responsive, but it may

3   be helpful anyway -- the relative risk for these

4   various risk factors are in the literature, for example

5   the Surgeon General report and many other studies.   So

6   I have access to and am aware of relative risks for

7   various risk factors, or if not specific relative

8   risks, the understanding in the literature that these

9   are risk factors that increase mortality.

10   Now the second part of answer has to do with

11   what I myself have actually calculated, and we're going

12   to be coming to several charts in which I have

13   calculated some relative risks, and --

14   Q.   All right.   Well, let me see if we can find

15   those because so far I haven't found them.   I've got,

16   "Attributable deaths overstates actual deaths."

17   And then I ran out of those.   So let me see if I can

18   find some others.

19   Help me find to a chart, if it's possible,

20   that shows where those risk factors have been used to

21   calculate relative risks in the CPS-II study by you.

22   A.   Okay.   Just a minute I'm going to pick on --

23   there are several charts, but I'm going to pick on one

24   of them because it's an easy chart to explain.   And

25   it's got two bars on it, one of the bars has a 1 on

29

51955 9953

1   top, and the other has a 0.33 on top.

2   Q. All right. I need to look for it. Does it

3 have a title?

4   A. "Relative risks are affected by nonsmoking

5 behaviors," and I'm looking at the males chart.

6   MR. WILNER: If counsel would help me, was any of

7 this faxed? I don't think so.

8   MR. PLESEC: This was given to you a couple of

9 weeks ago in the stack of potential exhibits to be used

10 with Dr. Wecker.

11   MR. WILNER: Stand by just one moment because it's

12 faster if I find it.

13   I've got, "Attributable deaths overstates

14 actual deaths" -- that's not it -- "Relative risks are

15 affected by nonsmoking behavior," okay. I see that.

16 All right.

17   It says, "All-causes of death, female," and I

18 guess there is one that says, "All-causes of death,

19 male"?

20   A. Right. Pick any one you want.

21   Q. I just don't see the males.

22   So anyway, I can imagine -- what are the

23 numbers for the males?

24   A. .33.

25   Q. .33 versus 1?

30

<< NOGARA REPORTING SERVICE >>

1   A. Yes.

2   Q. And the relative risks you see there are,

3   "Overweight, no exercise, bad diet, never smokers" on

4   one side, right?

5   A. That's correct.

6   Q. And the other one is, "Smokers, average

7   weight, moderate exercise, good diet"?

8   A. That's right.

9   Q. Okay. Have you done any other calculations of

10   the effect of these risk factors other than what I see

11   in the female and what I hear you say on the male --

12   although I haven't quite located that?

13   A. Yes, there are relative risks that are part of

14   -- I'm going to say about half the charts in the stack

15   that we haven't come to yet. Maybe you should direct

16   me to a chart, and I'll tell you whether it has

17   relative risks on it.

18   Q. I don't have very many more.

19   A. Uh-oh.

20   Q. Now, do you have a number on the bottom of

21   these charts?

22   A. No, I don't. But if you don't have all the

23   charts that's not very good. Maybe we should get you

24   the charts.

25   Q. Well, all right. We might need to. So let's

31

<< NOGARA REPORTING SERVICE >>

1   try to identify what it is that we have and what it is

2   that we don't have. Let's go back to the one that we

3   just talked about and let me ask you a few questions

4   about that.

5   MR. PLESEC: Counsel, let me just interject for a

6   second. I'm not sure if this will be helpful to you at

7   all, but there was a list of RJR exhibits that was

8   developed for purposes of this litigation, and there

    are a series of numbers running from No. 1058 through

    1073, and then 1376 through 1386, and then 1705, 1720,

11   1721, 1722. Those documents (sic) represent document

1   numbers for the exhibits that were provided to you as

    possible exhibits to be used in connection with

14   Dr. Wecker's testimony.

15   MR. WILNER: Okay. I see that, and that was a

16   help because now I can see we have them in exhibit

17   order so I wasn't aware of the up to 1376. And now

18   that I have that -- actually I go to 1378. All right.

19   Well, anyway, I think we can work it out.

20   Q. Let me go back to 1071, because I happen to

2   have that one in front of me.

22   A. But I don't have those numbers myself, so just

23   describe it.

24   Q. "Relative risks are affected by nonsmoking

25   behavior, all-cause of death, females."

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32

1   A. Females. Okay. I have it.

2   Q. Did you do any similar calculations for any

3 specific cause of death other than all-cause of death?

4   A. Yes.

5   Q. What causes of death?

6   A. Just a moment. I have charts that you have,

7 and you can read in the subtitle where it speaks of,

8 "Ten causes selected by Surgeon General"?

9   Q. "Relative risk of death from cirrhosis of the

10 liver"?

11   A. That's another one.

12   Q. Okay. "Attributable death overstates actual

13 death"?

14   A. Yes.

15   Q. "73,000 overweight or underweight, high blood

16 pressure," is that the one you mean?

17   A. Just a minute.

18   Q. "Selected causes, lung cancer, upper airway

19 digestive cancer, chronic obstructive pulmonary

20 disease, and vascular disease"?

21   A. That sounds right, but I'm not sure we're

22 looking at the same chart. But you sound like you're

23 finding an example of what you were looking for.

24   Q. Actually that was an attributable death. I

25 was really more interested in relative risks.

51955 9957

33

1   A.   But they were calculated and necessarily so to

2   produce this chart.   You asked if I calculated them.

3   Q.   Yes, okay.

4   Let me ask, do you have a chart that is

5   analogous to the chart which we have previously talked

6   about that says, "Relative risks are affected by

7   nonsmoking behavior, all-cause of death, females" --

8   let's assume I'm looking at that chart.

9   Do you have anything analogous to that that

10   concerns specific causes of death rather than

11   all-caused mortality, in that format?

12   A.   Not in that format; no

13   Q.   Okay.   Do you have an opinion as to whether

14   smokers who are of average weight, get moderate

15   exercise, and have a good diet are more or less likely

16   to die of cancer than never smokers who are overweight,

17   get no exercise, and have a bad diet?

18   MR. EDESEC: Object to the form of the question.

19   THE WITNESS: I have the opinion it would probably

20   depend on what the diet and exercise was.   But for some

21   diets, maybe yes; for others, maybe no.

22   MR. WILNER: Q.   Well, using exactly the criteria

23   that you used in the graph that we're looking at to

24   divide the people into two categories?

25   A.   No, I haven't done that calculation.   I was

34

1   speaking more generally.

2   Q.   Okay.   So if I were to -- so speaking of

3   exactly the calculation that you did to produce this

4   chart, which has assigned the numbers of 1 and .52 to

5   the two columns, my question is just so I'm clear --

6   and I realize it's repetition, but I want to make sure

7   I'm not misstating anything -- you do not have an

8   opinion as to what shape this graph would be were you

9   looking for -- if you were looking at lung cancer

10 mortality versus all-caused mortality?

11   MR. ALESEC: Object to the question.

12   THE WITNESS: And with no other change?

13   MR. WILNER: Q.   Right.

14   A.   I haven't done that calculation.   And I don't

15 have an opinion about how it comes out until I do it.

16   Q.   Okay.   Let me look at, then, something that I

17 see here called, "Deaths attributed to risk factors

18 overstate actual deaths."

19   A.   Okay.   Stand by.

20 Could you read the title again?

21   MR. WILNER: Off the record.

22 (Discussion off the record.)

23   MR. WILNER: Q.   I'm looking at a chart called,

24 "Deaths attributed to risk factors overstate actual

25 deaths."

35

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1   A.   Stand by.   I'm going to look for that.

2   Q.   Okay.   Standing by.

3   A.   Okay.   I found it.

4   Q.   The percentage on the right which says, "10

percent killed," in quotes, "by overweight or

underweight. 13 percent killed by high blood

pressure," where did those numbers come from?

8   A.   You've got to wait another minute because

there's more than one chart with the same title.

10   Q.   I'm sorry.

11   A.   I think I know which one you're looking at.

12   Q.   Well, look at either one you want. But the

one I have just says, "Deaths attributed to risk

factors overstate actual deaths, U.S. smokers."

15   A.   There are several charts that have exactly

that title.

17   Q.   All right. And this one starts, "165 percent

killed by other risk factors."

19   A.   That makes it unique, and I have it.

20   Q.   Tell me where the percentages that are used --

that are expressed in the text are derived.

22   A.   I calculated them.

23   Q.   Okay. Give me an idea of how did you that.

24   A.   It's the standard calculation, same as Surgeon

25   General, for attributable fractions.

36

<< NOGARA REPORTING SERVICE >>

1   Q.   When you say you calculate them, you calculate

2   them using the CPS-II database?

3   A.   That's right.

4   Q.   Okay. So you were using specific -- you were

5   using all-caused mortality in the study period, right?

6   These are just deaths.

7   A.   Yeah, I think this is all-caused. Just a

8   moment.

9   Yes, it's all-caused.

10   Q.   For instance, if we pick the 40 percent killed

11   by lack of exercise, let's just pick that one for

12   instance, the attributable risk calculation would be a

13   derivation of the relative risk calculation that you

14   did using the two populations that you defined earlier

15   between people who exercise and people who don't?

16   MR. PLESEC: Object to the form of the question.

17   MR. MISNER: Q.   Did I get that right?

18   A.   I think right. It's the moderate and heavy

19   group as a base group.

20   Q.   Right.

21   A.   And then the risky groups are the slight

22   exercise group and the none-at-all exercise group.

23   Q.   Right, I understand that. In the same way

24   that we previously talked, that's what I mean to

25   express.

37

<< NOGARA REPORTING SERVICE >>

51955 9961

1   So you obtained a relative risk between the

2   people who fell into those two exercise categories,

3   right?

4   MR. PLESEC: Object to the form of the question.

5   THE WITNESS: I did the none category and compared

6   it to the moderate-heavy category. And then I also did

7   the slight category and compared it to the

8   moderate-heavy category, which is not a departure from

9   the method of the Surgeon General. That's the way they

10 do it.

11   MR. MILNER: Q. So what was the relative risk of

12 all-caused mortality between the nonexercisers and the

13 moderate-to-heavy exercisers?

14   A. I think I've got that number here, so if

15 you'll just stand by, I actually have that one.

16   Q. Okay.

17   A. 1.81.

18   Q. And what was the relative risk between the

19 slight exercisers and the moderate-to-heavy?

20   A. 1.64.

21   Q. Which of those did you use in calculating the

22 attributable percentage of 40 percent?

23   A. Both. I used none for the none category and

24 slight for the slight category.

25   Q. And you factored in the number of people in

38

1	each population to do that calculation?
2	A. Right.
3	Q. Did you do similar calculations for any other
4	cause of death other than all-cause?
5	A. Yes.
6	Q. For which?
7	A. There are some charts here that look something
8	like the ones you're looking at now but have different
9	titles.
	Q. Yes.
11	A. And they say in the subtitle, "For the ten
12	causes selected by the Surgeon General." And then
13	there are some other charts that look something like
14	these charts, and they say, "Attributable deaths from
15	selected causes."
16	Q. Yes.
17	A. Well, that's my answer.
18	Q. Okay. Let me look at another chart then.
19	I see a chart now that says, "Attributable
20	deaths overstates actual U.S. deaths in 1985 of persons
21	age 35 to 69 from all-causes versus attributable deaths
22	from selected causes."
23	A. Okay. Just a moment. I think I have your
24	chart.
25	Q. All right. So my first question is is this

39

<< NOGARA REPORTING SERVICE >>

1   the chart that you were -- that you could use to

2   illustrate the calculations of attributable risks from

3   other causes than all-caused mortality?

4   A.   This is one of them.   There are several charts

5   like this.

6   Q.   All right.   So the numbers that appear in the

7   columns are what, "73,000 overweight."   What does

8   73,000 represent?

9   A.   I haven't found that yet.   Stand by.

10   Okay.   I found that.

11   The first thing to point out is that that

12   73,000 is one of the numbers that I revised and sent

13   you in the revised fax.

14   Q.   Thank you.   What's your revised number?

15   A.   It's at 58,000.

16   Q.   Okay.

17   A.   And your question is, what does that

18   represent?

19   Q.   Yes, how is that number derived?

20   A.   It's an attributable-deaths calculation, but

21   not for all-causes.   It's only for the causes described

22   at the bottom of the page.

23   Q.   Is it attributable to the U.S. population?   In

24   other words it's a number, not a percentage.   How is

25   the raw number, 58,000, derived?

40

<< NOGARA REPORTING SERVICE >>

1   MR. PLESEC: Object to the form of the question.

2   THE WITNESS: I think the short answer is yes, it

3   is U.S. population attributable deaths from the

4   selected causes at the bottom of the page.

5   I can go further on that but maybe that was

6   enough.

7   MR. WILNER: Q.   Well, is that obtained by

8   multiplying ten percent, which was your overweight or

9   underweight filled fraction, by the total number of

10   U.S. deaths?

11   MR. PLESEC: Object to the form of the question.

12   THE WITNESS: No, nothing like that.

13   MR. WILNER: Q.   All right.   Well tell me, then,

14   how the 58,000 got to be.

15   A.   First, it's an attributable death calculation,

16   like the ones that the Surgeon General does and like

17   the ones that Peto does, which means that it combines

18   relative risk and prevalence according to a formula

19   that I'm sure you're familiar with that has some minus

20   ones in it.

21   Q.   Yes.

22   A.   Well I'm doing that formula, but I need to

23   have the inputs, which are a relative risk and a

24   prevalence.

25   Q.   And prevalence?

41

<< NOGARA REPORTING SERVICE >>

51955 9965

1   A. And the prevalence I get -- I'm going to tell

2   you where I get those now, if you want.

3   Q. Yes.

4   A. The relative risk I calculate from CPS-II.

5   And it's a relative risk from not all-causes, but the

6   selected causes described at the bottom of the page --

7   Q. Yes.

8   A.   for -- let's just do -- I happen to have

9   the exercise page open because we talked about that --

10   say for the none category versus the moderate and heavy

11   category   which we've talked about before so it makes

12   sense.

13   And then I get a prevalence of, in this case,

14   exercise, for no exercise, and I get that one out of a

15   Kaperson article, which I can I think fetch for you

16   here in a minute.

17   "1986 Public Health Report." It comes from

18   NHIS.

19   Q. Well, did they use exactly the same standards

20   for measuring exercise as the CPS-II?

21   A. They have similar categories, but they call

22   it, for example, sedentary. And I used the sedentary

23   category for what CPS-II calls none. And they call

24   irregularly active a category. That would be like the

25   slight category.

42

<< NOGARA REPORTING SERVICE >>

51955 9966

1   Q.   Do you have the Kaperson article in front of

2 you?

3   A.   Yes, I just grabbed it.

4   Q.   Thank you. Can you give me the citation,

5 please?

6   A.   Yes. It says, "November" hyphen "December

7 '86, Volume 101, No. 6."

8   Q.   Of what?

   A.   Then it doesn't say any more. I'm looking to

   see where else we can go.

11   It's apparently in something called "Public

12 Health Reports."

13   Q.   Okay. What was the prevalence of lack of

14 exercise in that article?

15   A.   For males?

16   Q.   Okay. For males.

17   A.   24.8 percent.

    Q.   24.8 percent had lack of exercise and

19 everybody else had exercise according to that?

20   A.   Yes.

    Q.   What was the prevalence of lack of exercise in

22 the CPS-II population?

23   A.   As self-reported, I don't have that figure.

24   Q.   Did you check or did you correlate the outside

25 prevalence estimates for the U.S. population with that

43

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<< NOGARA REPORTING SERVICE >>

1   of the CPS-II?

2   MR. PLESEC: Object to the form of the question.

3   THE WITNESS: For exercise, do you mean?

4   MR. WILNER: Q. Well, for anything, for exercise

5   diet, social support?

6   A. Let's take them separately because I think

7   exercise is treated differently than the others. So

8   let's stick with that one for a moment.

            Q. Okay.

            A. I think the self-reported exercise, either by

11 CPS-II or by other self-reporting approaches to

12 exercise -- it is understood that people exaggerate how

13 much exercise they are doing. And so though I don't

14 remember the numbers, I suspect that there was a

15 self-reporting of more exercise in CPS-II than this

16 particular study that tried to get at that number. But

17 I don't have the figures so I'm going on vague memory.

            Q. What about on healthy diet, where did you get

19 prevalence data from that?

20   A. I think in all the other cases I calculate

21 that from CPS-II. Let me just check.

22   Yes, all the other categories are CPS-II that

23 I calculated myself.

24   Q. Have you reviewed a report prepared by the

25 Battelle Institute for the Centers For Disease Control

44

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http://legacy.library.ucsf.edu/tid/ziq07a00/pdf   http://www.industrydocuments.ucsf.edu/docs/gfgl0001

1 And Prevention entitled, "Final report, smoking

2 attributable mortality; control for confounding," dated

3 February 1st, 1997.

4 MR. PLESEC: Would you repeat that again, please.

5 MR. WILNER: Yes, have you reviewed a report,

6 which report is authored by the Battelle -- I believe

7 it's Battelle Laboratory, but it jest says "Battelle,"

8 B-A-T-T-A-L-L-E -- which report is titled, "Final

9 report, smoking attributable mortality; control for

10 confounding," and which report is dated February 1st,

11 1997?

12 A. I don't think so.

13 Q. Okay. Were you aware that the Center For

14 Disease control had commissioned the Battelle

15 Laboratory to perform a study on the control for

16 confounding of the CPS data?

17 A. No.

18 Q. Are you currently reviewing the literature on

19 the issue of confounding of CPS-II data?

20 A. No, but you inspire me to read this report,

21 although I'm not doing -- I would be a smart-aleck if I

22 said, "Right now what I'm doing right now is answering

23 your questions."

24 But the gist of your question is different

25 than that, and so I probably will look at this since

45

1   you brought it up.

2   Q.   Thanks.   The chart that we've been discussing,

3   the "Attributable deaths overstate actual deaths," in

4   the category "Unhealthy diet," the prevalence data and

5   relative risk data have been obtained from CPS-II data;

6   is that correct?

7   A.   Yes.

8   Q.   And the attributable risk has been quantified

9   by using the CPS-II relative risk and the CPS-II

10   prevalence and the United States population?

11   MR. _____SEC: Object to the form of the question.

12   It's not even a question.

13   THE WITNESS: I'm thinking, just a minute.

14   I think the answer is yes.

15   MR. WARNER: Q.   Okay.

16   A.   Would you ask that again?

17   Q.   No, I couldn't possibly remember.

18   A.   Then don't trust my answer.

19   Q.   Let me see if I can work through this again,

20   and it's just -- I apologize if my question was

21   unclear.

22   A.   Do you want me to just volunteer something and

23   maybe it will clear it up?

24   Q.   Well, yeah, I want you to volunteer something.

25   Let's start with the equation for attributable risk.

46

1   And tell me how to write it down, and then we'll work

2   from that concrete point.   Okay?

3   A.   Attributable fraction?

4   Q.   Yes, attributable fraction.

5   A.   Is going to be the sum of prevalence, left

6   parenthesis, relative risk minus one, right

7   parenthesis, divided by the same expression plus one.

8   So to do that calculation you need prevalences

9   and relative risks, and I get both of those from the

10   CPS-II data except for the prevalences that had to do

11   with exercise that we already talked about.

12   Q.   I understand.

13   And the result is an attributable fraction,

14   which is expressed how?

15   A.   As a fraction.

16   Q.   As a fraction.   So for instance, the

17   attributable fraction for unhealthy diet, using the

18   CPS-II relative risk and prevalences was what?

19   A.   It's an intermediate calculation.   I don't

20   have that.

21   Q.   Is it not the same fraction that you

22   calculated in this earlier chart of 51 percent?

23   A.   No, because I've changed -- the deaths that

24   I'm looking at are different, and so it's not the same.

25   Q.   The deaths, you mean the causes of death were

51955 9971

47

1   different?

2   A. Yes.

3   Q. But the concept of generating the fraction is

4   the same. You're just generating it for different

5   causes of death; is that fair?

6   A. That's correct. The attributable fraction

7   calculation is, let's say, in spirit the same every

8   time I do it.

         Q. And in this case of this chart that we've been

    looking at, No. 1382 -- although I don't have that

11   number -- you added the deaths from lung cancer, upper

12   airway digestive cancer, COPD, and vascular disease,

     correct?

14   A. I didn't add them. I would say I included --

15   adding is maybe not wrong, but I would say I included

16   the deaths from those categories in calculating the

17   relative risks.

         Q. I understand. And you then obtained an

19   attributable fraction as an intermediate calculation,

20   which was a number less than one and could be expressed

21   as a percentage?

22   A. That's right.

23   Q. And then you multiplied the percentage times

24   something to obtain 310,000 in the case of unhealthy

25   diet?

                                                    48

<< NOGARA REPORTING SERVICE >>

1   A.   Yes.

2   Q.   What number did you multiply the fraction

3   times?

4   A.   Just a moment, I will find it.

5   I used deaths from selected causes that I find

6   in a Peto document, which I call Peto 1994.

7   Q.   Yes, I understand.

8   For the U.S. population?

9   A.   Just a moment.

10   Yes.   I finally found it.

11   Q.   Is that number not 686,000 as the sum of

12   deaths from these selected causes?

13   A.   No, because I'm following Peto's methodology,

14   and he does his calculation separately by five-year

15   able groups.   That's why it took me a while.

16   Q.   What number does he use?

17   A.   He uses -- well, there are two reasons the

18   number is different: One is I'm looking at selected

19   causes, and the 686,000 is all-causes.   And the second

20   reason is that he counts out the attributable deaths to

21   selected causes separately by five-year age groups, and

22   so he would -- he does it in pieces.

23   Q.   Well, what do you multiply your attributable

24   fraction by to get 310,000?

25   A.   Where are you seeing 310,000?   Okay.   On the

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1 unhealthy diet section. I was on another page.

2   But to get any of the number of attributable

3 deaths, I multiply by the number of deaths from the

4 selected causes in a five-year age group, and then I

5 have to do it for the next five-year age group, and

6 then I do it for the next five-year age group, and I

7 add them all together.

8   Q. So you sum all the five-year age groups, using

9 the same attributable fraction for each?

10   A. No, I do the relative risks separately also by

11 five-year age group because that's the way he does it.

12   Q. You do the relative risk separately for each

13 five-year age group in CPS-II?

14   MR. PLESEC: Object to the form of the question.

15   THE WITNESS: Yes, I was explaining the basic

16 calculation. In the application by Peto, he happens to

17 do it by five-year age groups, then of course

18 separately for males and females.

19   MR. WILNER: Q. Okay.

20   A. But once you understand how to do it once,

21 then you just keep doing it.

22   Q. Now, where does the number, 686,000 come from?

23   A. Just a moment. I'll get it. It's a Peto

24 number. I'm going to find the page. Just a moment.

25   You can find it in Peto of '94. It's on Page

50

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1   534.

2   Q.   All right. I just don't happen to have that

3   in reach, although I could find it. But to save time,

4   what does that number represent?

5   A.   Males and females, deaths from all-causes,

6   United States, 1985.

7   Q.   Oh, 1985.

8   So that would be the all-caused mortality in a

9   year in the United States?

10   A.   Right. Look at the subtitle -- I tried to get

11   it right -- of the chart.

12   Q.   Right, I know that's what it says, and that's

13   what I was confirming in my question. That's fine.

14   Let me turn to another chart, please.

15   A.   Okay.

16   Q.   "Relative risks from death from cirrhosis of

17   the liver."

18   A.   Just a moment. Okay.

19   Q.   Are these relative risks that you have

20   computed, or were they taken from other publications?

21   A.   I computed them.

22   Q.   Did you break down the -- oh, okay. Just a

23   minute.

24   This has a population defined as light

25   smokers. Who are the light smokers?

51

1   A. Current cigarette smokers with 1 to 20

2   cigarettes per day.

3   Q. Okay. Now, did you calculate this in an

4   effort to demonstrate confounding of tobacco mortality

5   with alcohol consumption?

6   MR. PLESEC: Object to the form of the question.

7   THE WITNESS: It's calculated to demonstrate the

8   effects of confounding.

9   MR. WIENER: Q. And did you understand that this,

10   the confounding that you were attempting to illustrate

11   was primarily from the effects of alcohol consumption?

12   A. I would say it the other way around, that it's

13   confounding because the risk is understood not to be in

14   fact due to smoking.

15   Q. And that would be understood by whom?

16   A. It's understood by me, but it's a medical

17   thing.

18   Q. And to what do you attribute, then, the

19   observed relative risk?

20   A. Why it goes up? I attribute that to

21   confounding.

22   Q. Confounding by what?

23   A. I'm not sure how to answer that.

24   Q. What factors are confounding the results?

25   A. Whatever it is that causes cirrhosis of the

52

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1 liver appears to be found in smokers and heavy smokers

2 more so than never smokers.

3   Q. Well, do you have any biologic explanation?

4   A. I understand the explanation to be

5 statistical, that smoking is not the cause of

   cirrhosis.

7   Q. And what is the cause of cirrhosis?

        A. Well, you will have to ask a medical person.

9 My lay understanding is it has to do with alcohol

10 consumption but I don't need to know that to make the

11 point I want to make with this chart.

12   Q. Have you done any analyses to term what other

13 factors may be confounding cigarette smoking?

14   A. No.

15   Q. What other factors may be confounding it in

16 the case of cirrhosis?

17   A. The way you put the question -- and I know I

18 have an obligation to answer your question even if I

19 don't like it -- but it seems upside-down from the way

20 my opinion and purpose is with this chart.

21   Q. Have you calculated the number of light,

22 heavy, and never smokers who drink alcohol?

23   A. No.

24   Q. Okay. Have you calculated whether more never

25 smokers than current smokers eat high-fat foods?

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1   A.   I don't think I've done that calculation.

2   Q.   Have you calculated whether more smokers

3 versus never smokers are overweight?

4   A.   Oh, let me -- I'm sorry. Can I pause a

5 minute?

6   Q.   Yes.

7   A.   Maybe we should take a break. I'm getting

8 tired.

9   But I should have said a moment ago, yes,

10 that's all those charts we started talking about, the

11 ones with the little squares on them, when we first got

12 started.

13   Q.   Yes, I understand. And just let me complete

14 the thought, then certainly we can take a break.

15   But did you develop percentages between

16 smokers and nonsmokers for those boxes?

17   A.   Yes, they were developed to allow me to know

18 whether smokers, for example, eat more fried foods than

19 never smokers.

20   Q.   All right. And so when you come back I would

21 like to have those percentages given to me, since I

22 don't think they are on the chart itself. Mine just

23 has an open box.

24   A.   I'm going to have to take a break, but when I

25 come back I can at least tell you easily which one has

51955 9978

1   more.

2   MR. WILNER: Okay. That's fine.

3   THE WITNESS: Okay. Let's take a break. We'll

4   just leave you on the machine.

5   (Brief recess.)

6   MR. WILNER: Q.   Okay. Turning to the lifestyle

7   choices chart, the eating and drinking choices, do you

8   know the percentages of smokers and never smokers who

9   fall into these categories?

10   A.   I don't have the percentages, but I can tick

11   down and tell you which is the greater.

12   Q.   Where is the number that represents the

13   fraction, physically where is it kept?

14   A.   I would have to go asking. It's probably on a

15   computer.

16   Q.   But you can't testify as to what that number

17   is right now?

18   A.   No, and I hadn't intended to testify as to the

19   number. The point was just one of them do more.

20   Q.   All right. I understand. Just a minute. I

21   was all ready for that, to write down the numbers. So

22   let me switch over.

23   So you can't testify how many current smokers

24   versus never smokers are overweight or underweight?

25   MR. PLESEC: Object to the form of the question.

                                                    55

1   THE WITNESS: I can't tell you the answer to that

2   in number terms right now. I can just tell you whether

3   -- referring to the chart here on eating and drinking

4   choices -- whether smokers, for example, eat more fried

5   food than never smokers, and on down the list.

6   MR. WILNER: Q. Other than the effect of smoking

7   on cirrhosis, on the likelihood to die of cirrhosis of

8   the liver, have you done any other calculations of the

9   effect of cigarette smoking on different causes of

10 death?

11 MR. SSEC: Object to the form of the question.

12 THE WITNESS: I didn't do a calculation showing

13 the effect of smoking on cirrhosis of the liver.

14 MR. WILNER: Q. Okay. I'm sorry to have placed

15 it in that respect. Let me see if I can be more clear.

16 The chart we talked before, that my number is

17 1384, shows relative risks for death from cirrhosis of

18 the liver as a function of category of smoking, i.e.,

19 never smokers, light smoking, and heavy smoking. Is

20 that not correct?

21 A. Yes.

22 Q. Other than cirrhosis of the liver, did you do

23 any similar calculations showing the relative risk

24 between heavy smokers and never smokers for various

25 diseases?

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1   A. Specifically heavy versus never?

2   Q. Heavy, light, or never, or any combination of

3   those.

4   A. Well, let's take an example. See, we've

5   already been on a page in which we have smokers on one

6   bar and never smokers on another.

7   Q. Yes, but that was not about cause of death, as

8   I understand it. That just was about habits.

9   A. No, that's relative risks of mortality.

10   Q. Okay. Let me see if we can get back to that.

11 I don't mean to be obtuse, but please tell me what

12 chart you mean, and I'll try to find it.

13   A. Let's take the one that has 0.33 on the

14 right-hand side.

15   Q. Okay. The 0.33, that was a combination of

16 many factors, smoking, being of average weight,

17 moderate exercise, and good diet. Was it not?

18   A. Right.

19   Q. Do you have any similar charts that show the

20 effect of smoking without these other variables?

21   MR. PLESEC: Object to the form of the question.

22   THE WITNESS: Well, your question is about do I

23 have anything similar. It's hard to know where to draw

24 the line.

25   MR. WILNER: Q. All right.

57

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1   A. I think we've covered every kind of chart that
2 I have by now.

3   Q. All right.

4   A. And so --

5   Q. Let me go on to another question.

6 What is the -- in the CPS-II data, what is the

7 relative risk between never smokers and current smokers

8 for dying of lung cancer within the study period?

9   A. What study period -- do you mean CPS-II?

10   Q. Yes.

11   A. I would have to look that up in the Surgeon

12 General Report. I don't have it at the tip of my

13 tongue.

14   Q. Okay. You do not question that statistic in

15 the Surgeon General report?

16   A. Well, I question the interpretation of it.

17   Q. I understand. But you don't question the

18 statistic?

19   A. I question the interpretation of the

20 statistic. I think that's an important concern.

21   Q. I understand. As far as the computation of

22 relative risk between the category of smokers and never

23 smokers that the Surgeon General has done, do you

24 question that?

25   MR. PLESEC: Object to the form of the question.

58

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1   THE WITNESS: I don't -- I can't think of a

2   mechanical concern in the application of the method.

3   My concern is with respect to how the numbers are

4   interpreted.

5   MR. WILNER: Q.   Okay.   Are you aware of any

6   single risk factor that is associated with a relative

7   risk of dying of lung cancer that is as high as that

8   between nonsmokers and current smokers -- I'm sorry --

9   never smokers and current smokers?

10   MR. PLESEC: Object to the form of the question.

11   THE WITNESS: Could you say that again.   Any

12 relative risk?

13   MR. WILNER: Q.   Yes.   Are there any other risk

14 factors that produce relative risk as high as the

15 relative risks produced by smoking?

16   A.   I think there probably are.   I don't have them

17 in front of me, but I think there probably are.

18   Q.   Do you think there are probably relative risks

19 as high for the production of lung cancer?

20   A.   Yes, but since I haven't got one here to show

21 you, I don't know how to support that.   I have to go

22 looking through the literature.

23   Q.   Based on the CPS-II data, are you aware of any

24 risks that are as high?

25   A.   I would still have to go digging through the

59

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1   literature and see whether they were based on CPS-II

2   data or whether they are based on some other data.

3   Q. Based on your calculations of CPS-II data?

4   A. I haven't done all those kinds of

5   calculations. I would go into the literature to deal

6   with this question.

7   Q. Would it be fairly easy to compute the

8   relative risk of dying of lung cancer between smokers

9   and never smokers in the CPS-II population?

10   MR. PLESEC: Object to the form of the question.

11   THE WITNESS: It's expert kind of work. It's not

12   so easy that just anybody can do it.

13   MR. WILNER: Q. Well you could do it, couldn't

14   you?

15   A. Yes.

16   Q. And you would count the number of nonsmoker

17   deaths, divide by the never smoker population and then

18   count the number of smoker deaths and divide by the

19   smoker population?

20   MR. PLESEC: Object to the form of the question.

21   MR. WILNER: Q. Is that basically it?

22   A. It's the right idea.

23   Q. But you have not done that for specific risk

24   factors and lung cancer in the CPS-II data?

25   MR. PLESEC: Object to the form of the question.

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60

1   THE WITNESS: I don't think so.   But if the charts

2   that we've gone through have that material on them or

3   something related to that, then you have those charts.

4   MR. WILNER: Q.   I understand.

5   A.   But as far as if I were making the judgement

6   as to whether I had them, I don't think so.

7   Q.   And not to mislead -- I mean to try and

8   understand your charts -- one that we did look at had a

      combination of diseases including lung cancer, but did

      not appear to separate out lung cancer.   Is my

11   recollection consistent with your recollection about

12   that chart?

13   MR. PLESEC: Object to the form of the question.

14   Woody, it may be helpful if you point to the chart

15   you're talking about.

16   MR. WILNER: We can't point because we are just

17   over the issue, and we don't have numbers on them that

18   he knows, so I'm trying to do my best.

19   Q.   But we looked at the attributable fraction

20   chart.   And on the bottom of the chart it says,

21   "Surgeon general's categories of death," and it says

22   "lung cancer, COPD," and it had two other categories.

23   Do you remember that chart?

24   A.   Yes, I have several like that.

25   Q.   Okay, fine.   So my understanding is that those

61

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1   treated those causes of death together and did not

2   isolate lung cancer from the rest?

3   A.   You're understanding correctly.   Your

4   understanding is correct.

5   Q.   You have my curiosity back about that chart.

6   Unfortunately they are not in order, so that's why I

7   look a little time.   Okay, I've got it.

8   I asked you this, I apologize.   Just tell

9   me that you've already answered and I'll go on.

10   I see this chart that we spent so much time on

11   that says "Selected causes, lung cancer, upper airway

12   digestive, obstructive pulmonary disease, and vascular

13   disease.   And this is the chart that has the numbers

14   beginning 73,000 -- though you corrected that 58,000 --

15   79,000 for high blood pressure and so on.

16   Now my question is, we talked about obtaining

17   the prevalences and the relative risks, and you said

18   that you obtained the prevalences and the relative

19   risks from the CPS-II data, except in the case of

20   exercise when the prevalence came from some other

21   article.   Are we still on the same page basically?

22   A.   Yes.

23   Q.   Did you tell me what the relative risks were

24   for these various factors?   -- I don't mean to be

25   tricky.   Let me just ask you.

1   Can you tell me the relative risks that you

2   used for these various factors -- including

3   underweight, high blood pressure, lack of exercise, et

4   cetera?

5   A.   I jotted down one example because I would then

6   be able to take you through it in detail.

7   Q.   Yes?

8   A.   But here's the problem -- and we've discussed

9   it -- this is a calculation we're looking at that is

10   done by five-year age groups.

11   Q.   Okay.   Can you tell me the relative risk for

12   any of those age groups?

13   A.   Yes, I've got one for one age group, and all

14   the others are done similarly, but I don't have those

15   other numbers.

16   Q.   Which age group do you have?

17   A.   35 to 39, males.

18   Q.   35 to 39?

19   A.   Yes.

20   Q.   Do you have anything older than that?

21   A.   No, not that I can tell you about.   The rest

22   of the calculations goes up to age 69.

23   Q.   Okay.   But somewhere there exists the

24   calculation of relative risk for these selected causes

25   of death for these risk factors in the CPS-II

63

1   population?

2   MR. PLESEC: Object to the form of the question.

3   THE WITNESS: That number had to be calculated in

4   the course of making the calculation that I've

5   presented here. And so it's calculatable, but I only

6   specifically asked that I get one example, and I worked

7   my way through it with my pencil here. And I have the

8   relative risks, and I can take you through that one.

9   MR. WILNER: Q. I'm going to ask you that in a

10   minute. Just a minute.

11   All right. I have just noticing that in your

12   14 risk factors that we see that high blood pressure

13   was one of the factors.

14   MR. PLESEC: Excuse me, Woody, your statement got

15   blurted out somehow. We didn't get all of the words

16   MR. WILNER: I'll say it again.

17   Q. I didn't see that high blood pressure was one

18   of the factors that we talked about earlier. Is that

19   because you don't characterize it as a lifestyle

20   choice?

21   MR. PLESEC: When you say "earlier," are you

22   talking in connection with a particular chart?

23   MR. WILNER: Yes, the chart that we looked at that

24   says, "Lifestyle choices that increase mortality risk."

25   THE WITNESS: Right. It doesn't belong on that

64

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1   chart.

2   MR. WILNER: Q.   I understand.   Where did the high

3   blood pressure come from on the CPS-II chart?

4   A.   CPS-II data.

5   Q.   On the questionnaire?

6   A.   Yes.

7   Q.   All right.   Tell me the relative risk, then,

8   for the category, what is it, 34 to 39 or something?

9   A.   35 to 39, males.

10   For no exercise it was 7.58.   For slight

11   exercise it 37.

12   Q.   Okay.

13   A.   And that's the answer.

14   Q.   What about unhealthy diet?

15   A.   I don't -- I only got one here because I

16   didn't think you would have the patience to go through

17   a hundred or 200 of them.

18   Q.   You don't have the relative risk for anything

19   else but the exercise that you told me?

20   A.   I'm looking to see if I might by accident have

21   it, but there are so many of them I'm pretty sure I

22   don't.   Just a moment.

23   No, that's the only one that I've marked down.

24   Q.   Have you got any report that has these

25   intermediate calculations that you would use to refresh

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1   your recollection if you were to testify about these

2   matters?

3   A. No, I don't, but I certainly wouldn't testify

4   with respect to all those details. I would do one as

5   an example and then say I did all the other age

6   categories and gender categories in the same way.

7   Q. I understand. I'm just asking if you have the

8   documentation supporting these charts, is available to

9   you, and that you might use in connection with your

10   testimony.

11   A. I hadn't expected to use anything but this

12   chart.

13   Q. Is there, in fact, supporting documentation

14   from which this chart or these charts were derived?

15   A. I'm trying to find something that might fit

16   that category.

17   No, I simply would have to prepare that. It

18   would probably be quite a few pages, and I'd have to

19   format it. It's not a terribly hard thing to do, but I

20   haven't got it.

21   Q. Well, when you prepared the chart, what did

22   you have at your disposal to use as a basis for the

23   numbers that were used the chart?

24   A. The final result of the calculation, which is

25   the numbers that go in the chart.

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1 Q. But the final result of the calculation was in

2 written form or in -- well, what form was it in?

3 A. When I saw it, it was in the form of this

4 chart, and I would have to go quizzing the people that

5 helped me here to get you further details on that as to

6 whether they were looking at a screen or what.

7 Q. So the chart was prepared by others -- other

8 people than yourself?

9 A. At my direction.

10 Q. And the numbers that were used to fill in the

11 chart were done -- the actual numbers were filled in by

12 others from calculations that you did not see done?

13 A. I was involved in the process. I did not

14 actually sit in front of the computer and make this

15 particular chart. I had it made at my direction.

16 MR. WILNER: Okay. For convenience of counsel,

17 while you're out there, we'll request as humbly as we

18 can for any supporting information that the doctor

19 might have to support any of the numbers or

20 calculations in the chart, whatever that might be.

21 MR. PLESEC: Which chart are you talking about?

22 MR. WILNER: Any of these charts that we have

23 talked about. I think there are similar enough so that

24 that would apply to all of them. So if there are,

25 there are, there are. If there are not, there are not,

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1   I understand. If there are tables or calculations,

2   printouts that support these numbers, we would ask for

3   them. And I guess you take that from there.

4   MR. PLESEC: Okay. We'll take your request under

5   advisement.

6   MR. WILNER: I understand. That's fine.

7   Also, let me ask this: Dr. Wecker, I deposed

8   you in a previous case known as Clark versus Leggett &

9   Myers last summer. I don't know if you remember that,

10   but I did. And in that case I asked for you to provide

11   to counsel a tape consisting of the CPS-II data that

12   you used to make your calculations -- which were

13   similar to these, not identical, but similar. And I

14   received in the mail a tape which contained all the

15   male information.

16   Since I didn't depose you again after that, I

17   didn't know whether you, you yourself, used the male --

18   used the female data as well as the male. And now I

19   understand that you do have the female data and have

20   used it. So I would ask counsel to supply the female

21   data in the same format that it was earlier supplied

22   for the male data. And it's unnecessary to re-supply

23   the male data, since I have that.

24   MR. PLESEC: As I understand it, you're request is

25   for female data similar to that which was provided in

68

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1 connection with the Clark case?

2 MR. WILNER: Yes, I think Dr. Wecker will recall

3 that he copied a tape for me in the Clark case and that

4 -- actually there were two tapes of ASCII data

5 consisting of all-male records of the CPS-II.

6 Q. Let me just ask you, Doctor, did you do that

7 on request of attorneys last summer? It seems to me

8 that that's where it came from.

9 A. Yes. Again, it was done at my direction. I

10 didn't actually spin the tape.

11 Q. I understand. And my counts and analyses

12 showed that I had the male data, and I wasn't

13 suggesting that you did anything wrong and whatever --

14 whether I only asked for the male or only got the male

15 -- but I got 500 and something thousand records, and

16 they were all marked "M," so I guess I got the male.

17 But so that we're understanding each other and

18 the nature of my request -- and subject to whatever you

19 intend to do with it -- my request would be that you do

20 the same thing with the female, spin the tape for the

21 female as you have for the male.

22 A. Yes, I understand.

23 MR. WILNER: All right. In that way I would not

24 have further questions at this time.

25 MR. PLESEC: Okay. Thanks, Counsel.

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69

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1   (Whereupon, the deposition concluded

2   at 12:45 o'clock p.m.)

3

4   _____

5   WILLIAM WECKER, Ph.D.

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70

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1   STATE OF CALIFORNIA   )
)
2   COUNTY OF SAN FRANCISCO)

3   I, DANA DIBASILIO TOGNINI, a Certified

4   Shorthand Reporter of the State of California, duly

5   authorized to administer oaths pursuant to Section 8211

6   of the California Code of Civil Procedure, do hereby

7   certify that

8   WILLIAM WECKER, Ph.D.,

9   the witness in the foregoing deposition, was by me duly

10   sworn to testify the truth, the whole truth and nothing

11   but the truth in the within-entitled cause; that said

12   testimony of said witness was reported by me, a

13   disinterested person, and was thereafter transcribed

14   under my direction into typewriting and is a true and

15   correct transcription of said proceedings.

16   I further certify that I am not of counsel or

17   attorney for either or any of the parties in the

18   foregoing deposition and caption named, nor in any way

19   interested in the outcome of the cause named in said

20   caption.

21   Dated the 8th day of April, 1997.

22   [signature]

23   DANA DIBASILIO TOGNINI

24   CSR No. 10118 (California)

25

                                                              71

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COPY

William Wecker, Ph.D.
505 San Marin Dr., Ste. 200
Novato, CA 94945

Date: April 8, 1997
Re: Connor vs. RJR Tobacco Co.
Deposition Date: April 4, 1997

Dear Dr. Wecker,

Please be advised the original transcript of your deposition is ready for your review.

You have 35 days from the date of this letter to read, correct if necessary, and sign your transcript. It will then be sealed and sent to the examining attorney pursuant to the applicable law. You are not required by law to read and sign your deposition.

You may either come to our office to read and sign the original transcript, or you may contact your attorney or the attorney who arranged for you to be present at your deposition. If they have ordered a copy of the transcript you may review their copy and make corrections by submitting, signing and returning the attached form. If you choose to review your transcript at our office, please call first to make an appointment. Should you have any question regarding these instructions, please call.

Sincerely,

NOGARA REPORTING SERVICE
130 Battery Street, Suite 580
San Francisco, California 94111
(415) 398-1889

cc: All counsel
     Original deposition

72

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ATTORNEY'S NOTES

Page	Line	Notes

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William Wecker, Ph.D.

-#-

#10118 [1] 1:21

-&-

& [3] 3:16,20 68:8

-'-

'85 [1] 9:18
'86 [1] 43:7
'94 [1] 50:25

-0-

0.33 [3] 30:1 57:13,15

-1-

1 [7] 15:10,14 16:4 29:25 30:25 35:4 52:1
1.37 [1] 65:11
1.64 [1] 38:20
10 [1] 36:4
101 [1] 43:7
10118 [1] 71:24
1058 [1] 32:9
1071 [1] 32:20
1073 [1] 32:10
10:00 [3] 4:8,11,18
10:44 [1] 4:20
10:45 [1] 3:3
11:00 [1] 5:5
12 [2] 26:20 27:2
12:45 [1] 70:2
13 [1] 36:6
130 [2] 1:23 72:10
1376 [2] 32:10,13
1378 [1] 32:11
1382 [1] 48:10
1384 [1] 56:11
1386 [1] 32:10
14 [3] 27:14 28:1 64:12
146 [1] 15:15
165 [1] 36:17
1705 [1] 32:10
1720 [1] 32:10
1721 [1] 32:11
1722 [1] 32:11
1985 [3] 39:20 51:6,7
1986 [1] 42:17
1994 [1] 49:6
1997 [7] 1:13 3:3 45:3,11 71:21 72:4,5
1:00 [2] 4:16,17
1st [4] 5:5,6 45:3,10

-2-

2 [5] 11:10,12 13:15,20 26:7
2.81 [1] 38:17
20 [7] 23:21,21 24:12,13 24:15,15 52:1
200 [4] 3:5 11:8 65:17 72:2
24.8 [2] 43:17,18
2nd [1] 5:7

-3-

3 [5] 12:12,22 13:21 27:2 27:2
3.2 [1] 27:2
310,000 [3] 48:23 49:24 49:25
32202 [1] 3:17
34 [1] 65:8
35 [5] 39:21 65:17,18 65:9 72:8
358 [2] 6:20,21
39 [4] 63:17,18,19,20
398-1889 [1] 1:24 72:20

-4-

4 [1] 11:5
40 [2] 37:10 18:23
415 [2] 1:24 72:20
44114 [1] 3:2
444 [1] 3:16
4th [2] 1:13 2:2

-5-

500 [1] 69:1
505 [2] 3:5 72:2
51 [1] 47:22
534 [1] 51:1
58,000 [4] 40:15,25 41:14 62:14
580 [2] 1:23 72:19

-6-

6 [1] 43:7
67 [1] 15:16
686,000 [3] 49:11,19 50:22
6889 [2] 6:22,23
69 [2] 39:21 63:22

-7-

7 [1] 2:3
7.58 [1] 65:10
73,000 [5] 33:15 40:7,8 40:12 62:14
79,000 [1] 62:15

-8-

8 [1] 72:4
8211 [1] 71:5
8th [1] 71:21

-9-

901 [1] 3:21
904 [2] 6:16,19
94111 [2] 1:24 72:20
94945 [2] 3:6 72:3
95-01820-CA [1] 1:8

-A-

a.m [1] 3:3
ability [1] 10:23
able [5] 5:7 8:3 11:16 49:15 63:6
above [2] 24:13,15
absence [1] 18:5
absolute [1] 26:25
access [1] 29:6
accident [1] 65:20
accommodate [1] 4:24
according [3] 15:7 41:18 43:19
active [1] 42:24
activities [2] 9:1 25:25
actual [10] 9:25 29:16 30:14 33:12 35:18,24 36:14 39:20 46:3 67:11
add [4] 17:9 19:1 48:14 50:7
added [1] 48:11
adding [1] 48:15
administer [1] 71:5
advised [1] 72:7
advisement [1] 68:5
affected [4] 30:4,15 32:24 34:6
again [11] 21:23 22:18,23 35:20 45:4 46:16,19 59:11 64:16 68:16 69:9
age [15] 39:21 49:21 50:4 50:5,6,8,11,13,17 63:10 63:12,13,16,22 66:5
ago [4] 12:4 13:3 30:9 54:9
ahead [3] 7:22 15:23 16:17
airway [3] 33:18 48:12 62:11
al [1] 1:9
alcohol [4] 52:5,11 53:9 53:22
all-cause [4] 32:25 33:3 34:7 39:4
all-caused [15] 17:21 18:14,24 19:13,16 27:15 28:14 34:11 35:10 37:5,7 37:9 38:12 40:3 51:8
all-causes [7] 30:17,18 39:21 40:21 42:5 49:19 51:5
all-male [1] 69:5
allow [1] 54:17
ambiguous [1] 18:18
American [1] 8:5
among [3] 17:19,23 19:14
amount [1] 23:3
analogous [2] 34:5,9
analyses [2] 53:12 69:11
answer [18] 11:9 12:1,10 12:23 14:5 21:22 25:5,22 29:1,10 39:17 41:2 46:14 46:18 52:23 53:18 56:1 65:13
answered [1] 62:9
answering [1] 45:22
answers [1] 12:25
anyway [3] 29:3 30:22 32:19
apologize [3] 27:20 46:20 62:8
appear [2] 40:6 61:10
APPEARANCES [1] 3:14
appeared [1] 3:8
appearing [1] 3:18
applicable [1] 72:10
application [2] 50:16 59:2
applied [1] 20:15
apply [1] 67:24
appointment [1] 72:15
approaches [1] 44:11
April [8] 1:13 3:2 5:5,6,7 71:21 72:4,5
arithmetic [1] 23:11
arithmetically [1] 24:13
arranged [1] 72:12
article [5] 15:16 42:15 43:1,14 62:21
ASCII [1] 69:4
assigned [1] 35:4
associated [1] 59:6
assume [1] 34:8
ate [1] 17:6
attached [1] 72:14
attempt [1] 27:9
attempting [2] 27:16 52:10
attorney [6] 3:17,22 71:17 72:9,12,12
attorneys [1] 69:7
attributable [30] 29:16 30:13 33:12,24 36:25 37:12 38:22 39:14,19,21 40:2,23 41:3,15 45:2,9 46:3,8,25 47:3,4,13,17 48:6,19 49:20,23 50:2,9 61:19
attributable-deaths [1] 40:20
attribute [2] 52:18,20
attributed [3] 35:17,24 36:13
authored [1] 45:6
authorized [1] 71:5
available [1] 66:8
Avenue [1] 3:21
average [8] 23:22,23 24:5 24:9,10 31:6 34:14 57:16
aware [5] 29:6 32:17 45:13 59:5,23
awkward [1] 27:20

-B-

B [1] 2:5
B-A-T-T-A-L-L-E [1] 45:8
B-double-E-F [1] 16:25
bad [2] 31:3 34:17
bar [1] 57:6
bars [2] 29:25,25
base [1] 37:19
based [4] 59:23 60:1,2,3
basic [1] 50:15
basis [1] 66:22
Battelle [5] 44:25 45:6,7 45:7,14
Battery [2] 1:23 72:19
beef [3] 15:21 16:23,25
beers [1] 21:1
begin [3] 4:8,16 7:1
beginning [2] 9:12 62:14
begins [2] 9:23 10:10
behavior [3] 30:15 32:25 34:7
behaviors [1] 30:5
belabor [2] 18:11 20:3
belong [1] 64:25
below [3] 12:14 24:14,16
best [6] 4:24 5:2,10 14:5 27:23 61:18
bet [1] 11:15
between [17] 10:2 11:20 11:23 14:18,19 18:15 21:10 37:15 38:1,12,18 54:15 56:24 58:7,22 59:8 60:8
binary [1] 21:2
biologic [1] 53:3
blank [2] 11:10,13
blood [7] 33:15 36:6 62:15 63:3 64:12,17 65:3
blurted [1] 64:15
book [5] 9:18,25 10:5,6 11:8
bottom [5] 31:20 40:22

51955 9998 A

discussed [1] 63:8
discussing [1] 46:2
Discussion [1] 35:22
discussions [1] 7:10
disease [9] 18:15 28:14
  33:20,20 44:25 45:14
  48:12 62:12,13
diseases [2] 56:25 61:9
disinterested [1] 71:13
disposal [1] 66:22
divide [5] 15:6,7 34:24
  60:17,18
divided [1] 47:7
doctor [2] ...
document [2] 32:1 49:6
documentation [1] 66:8
  66:13
documents [3] 5:8,11
  32:11
doesn't [4] 5:23 20:14
  43:9 64:25
done [24] 5:10 ... 13:3
  19:1,8,10,19 ... :3
  26:9 31:9 34:25 35:14
  53:12 54:1 56:8 58:23
  60:4,23 63:10,14 67:11
  67:12 69:9
doubt [1] 11:19
down [11] 6:16 15:1
  16:11 20:19 ... 34:22
  55:11,21 56:5 63:5 65:23
Dr [14] 4:1,6,10,10.5:6,10
  5:23 6:3 30:10 32:19 68:7
  69:2 72:2,6
draw [1] 57:22
drink [1] 53:22
drinking [3] 6:22 55:7
  56:3
Drive [1] 3:5
due [1] 52:14
duly [3] 3:11 21:4,8
Duval [2] 1:3 33:16
dying [4] 28:2 55:8 59:7
  60:8

-E-

E [3] 2:1,5 4:6
easier [1] 10:19
easiest [1] 8:3
easily [1] 54:25
East [1] 3:16
Eastern [1] 4:17
easy [3] 29:24 60:7,12
eat [14] 9:2,2,8,8,12 10:13
  10:17 11:9 15:8 19:20
  20:4 53:25 54:18 56:4
eaters [1] 17:24
eating [5] 8:22 9:14 18:23
  55:7 56:3
effect [5] 31:10 56:6,9,13
  57:20

effects [2] 52:8,11
effort [1] 52:4
eggs [3] 15:20 16:21,22
eight [4] 25:10,12,13,15
either [11] 9:16 18:14
  23:21 24:15,23 25:22
  28:14 36:12 44:10 71:17
  72:11
end [1] 5:17
ends [1] 26:7
entire [1] 22:5
entitled [2] 8:21 45:1
equals [1] 26:14
equation [1] 46:25
errors [1] 6:9
ESTATE [1] 1:5
estimates [1] 42:...
et [2] 1:9 63:1
etc [1] 1:9
evening [1] 5:6
event [1] 6:3
everybody [2] 11:...
  17:16 24:19 25:1 6 43:19
evidence [3] ... 6:1
exactly [5] 20:6,14,22
  35:3 36:15 42:...
exaggerate [1] 44:12
EXAMINATION [2]
  2:3 7:4
examined [1] ...
examining [1] 72:9
example [10] 7:25 29:4
  33:23 42:22 54:1 56:4
  57:4 63:5 64:... 65:5
except [2] 47:10 62:19
exclude [1] 10:24
excuse [5] 13:18 22:21
  26:16 27:21 64:14
exercise [30] ... 4
  23:5,6 31:3,7 34:15,17,20
  37:11,15,22 ... 42:9
  42:14,14,20 43:14,18,19
  43:21 44:3,4,7,10,12,13
  44:15 47:11 57:17 62:20
  63:3 65:10,11,19
exercisers [2] 38:13,19
exhibit [1] 32:16
exhibits [5] 6:6 30:9 32:7
  32:12,13
exists [2] 18:7 63:23
expected [1] 66:11
expects [1] 5:17
expert [1] 60:11
explain [6] 4:13 8:2
  10:20 21:17 28:5 29:24
explaining [1] 50:15
explains [1] 27:7
explanation [2] 53:3,4
exposure [2] 25:3,5
express [1] 37:25
expressed [3] 36:21

47:14 48:20
expresses [1] 22:4
expression [1] 47:7

-F-

fact [2] 52:14 66:13
factor [2] 26:14 59:6
factored [1] 38:25
factors [33] 21:16 26:16
  26:18,19 27:10,14 28:1,3
  28:13,16,19,25 29:4,7,9
  29:20 31:10 35:17,24
  36:14,18 52:24 53:13,15
  57:16 59:14 60:24 62:24
  63:2,25 64:12,13,18
fair [1] 48:5
fairly [1] 60:7
fall [2] 23:4 55:9
familiar [2] 8:23 41:19
far [4] 20:16 29:15 58:21
  61:5
faster [2] 19:24 30:12
fax [3] 6:11,24 40:13
faxed [1] 30:7
February [2] 45:3,10
fell [1] 38:2
felt [1] 9:14
female [11] 8:8 9:17
  14:17 30:17 31:11 68:18
  68:19,20,25 69:20,21
females [9] 13:25 14:2,6
  14:11 32:25 33:1 34:7
  50:18 51:5
fetch [1] 42:15
few [2] 32:3 66:18
field [1] 9:13
figure [2] 28:8 43:23
figures [3] 23:8,10 44:17
file [2] 10:19,23
fill [4] 10:21 12:14 13:20
  67:10
filled [2] 13:19 67:11
final [4] 45:1,8 66:24 67:1
finally [1] 49:10
finding [3] 16:11 21:15
  33:23
fine [5] 4:19 51:13 55:2
  61:25 68:6
first [8] 3:11 28:10 29:1
  39:25 40:11 41:15 54:11
  72:15
fit [1] 66:15
five [2] 27:14 28:2
five-year [10] 49:14,21
  50:4,5,6,8,11,13,17 63:10
Florida [2] 1:3 3:17
follow [1] 16:3
following [1] 49:13
food [2] 17:24 56:5
foods [17] 9:2,2,8,8,12,15
  10:14,18 11:9 15:8,11

16:5,5 18:23 20:1 53:25
  54:18
foregoing [2] 71:9,18
forget [1] 24:4
form [28] 18:17 22:9 23:7
  27:4 28:17 34:18 37:16
  38:4 41:1,11 44:2 46:11
  50:14 52:6 55:25 56:11
  57:21 58:25 59:10 60:10
  60:20,25 61:13 64:2 67:2
  67:2,3 72:14
format [6] 11:2,3 34:11
  34:12 66:19 68:21
formula [2] 41:18,22
forth [1] 3:12
forwarded [1] 8:19
found [8] 11:20 18:4
  29:15 36:3 40:9,10 49:10
  53:1
four [1] 6:14
FOURTH [1] 1:3
fraction [16] 41:9 47:3,4
  47:13,15,16,17,21 48:3,6
  48:19 49:2,24 50:9 55:13
  61:19
fractions [1] 36:25
Francisco [3] 1:24 71:2
  72:20
frankfurters [1] 15:22
franks [2] 15:20 16:18
Friday [2] 1:13 3:2
fried [9] 9:2,8,12,15 10:14
  10:17 11:9 54:18 56:4
front [9] 9:3 10:4 11:17
  16:16 20:2 32:21 43:1
  59:17 67:14
function [2] 28:15 56:18
furnished [1] 6:5

-G-

gather [2] 5:11 6:4
gender [1] 66:6
General [10] 8:1 29:5
  33:8 36:25 38:9 39:12
  41:16 58:12,15,23
general's [1] 61:21
generally [1] 35:1
generate [1] 9:5
generated [1] 6:6
generating [2] 48:3,4
gist [1] 45:24
given [2] 30:8 54:21
goes [3] 27:8 52:20 63:22
gone [1] 61:2
good [5] 26:21 31:7,23
  34:15 57:17
grabbed [1] 43:3
graduate [1] 26:6
graduates [1] 26:4
graph [2] 34:23 35:8
greater [3] 12:9,25 55:11

group [26] 13:9 18:12,13
  18:23 19:14 21:10,11
  23:20,22 24:8 25:13,14
  25:16,24 28:1 37:19,19
  37:22,22 50:4,5,6,11,13
  63:13,16
groups [10] 20:23 22:19
  23:19 37:21 49:15,21 50:8
  50:17 63:10,12
guess [4] 15:23 30:18
  68:3 69:16
guessing [1] 19:18

-H-

H [1] 2:5
habit [1] 12:5
habits [2] 12:13 57:8
half [1] 31:14
ham [3] 15:21 16:14,18
handled [1] 25:4
hands [1] 15:14
hard [3] 21:5 57:23 66:19
Health [2] 42:17 43:12
healthy [1] 44:18
hear [1] 31:11
hearing [1] 4:15
heavy [12] 22:16,17,24
  23:6 37:18 42:10 53:1,22
  56:19,24 57:1,2
height [4] 23:19,24 24:5
  24:8
Hello [2] 8:14,15
help [6] 5:2 16:14 21:17
  29:19 30:6 32:16
helped [1] 67:5
helpful [3] 29:3 32:6
  61:14
hereby [1] 71:6
hereinafter [1] 3:12
high [13] 26:3,6 33:15
  36:6 59:7,14,19,24 62:15
  63:3 64:12,17 65:2
high-fat [10] 9:2,8 15:8
  15:11,17 16:5 17:24 18:23
  20:1 53:25
high-protein [3] 19:20
  20:5,7
higher [3] 17:20,25 19:16
hour [1] 3:3
hours [3] 4:10 25:10,12
humbly [1] 67:17
humor [2] 28:4,5
hundred [1] 65:17
hyphen [1] 43:6

-I-

i.e [1] 56:18
idea [2] 36:23 60:22
identical [1] 68:13
identify [3] 12:17 13:12
  32:1

II [2] 15:15,25
illustrate [2] 40:2 52:10
imagine [1] 30:22
immediately [2] 6:12 6:24
important [1] 58:20
inch [2] 23:24 24:6
include [2] 8:8 14:6
included [2] 48:14,15
including [2] 63:9 63:2
increase [4] 8:21 26:13 29:9 64:24
indicated [1] 17:4
individually [1]
information [4] 10:18 12:14 67:18 68:15
inputs [1] 41:23
inspected [1] 2
inspiration [1] 16:8
inspire [1] 45:20
instance [3] 37:10,12 47:16
Institute [1] 44
instructions [1] 72:16
intend [2] 28:5 69:19
intended [3] 5:19,24 55:18
interested [3] 23:2 33:25 71:19
interject [1] 32:5
intermediate [1] 23:13 23:15 47:19 48:19 65:25
interpretation [2] 58:16 58:19
interpreted [1] 59:7
introduced [2] 5:17,24
introducing [2] 5:21,22
involved [1] 67:17
irregularly [1] 42:
isolate [1] 62:2
issue [3] 19:8,10 45:10
issued [1] 5:5
items [1] 16:10
itself [1] 54:22

-J-

J [1] 1:9
Jacksonville [1] 3:17
Jean [2] 1:6 7:8
jest [1] 45:7
JONES [1] 3:20
jot [1] 6:17
jotted [1] 63:5
judgement [1] 61:5
JUDICIAL [1] 1:3

-K-

Kaperson [2] 42:15 43:1
keep [3] 16:7 27:19 50:21

kept [1] 55:13
keyed [1] 15:6
killed [4] 36:5,6,18 37:10
kind [4] 8:25 27:19 58:1 60:11
kinds [1] 60:4
known [2] 4:15 68:8
knows [1] 61:18

-L-

Laboratory [2] 45:7,15
lack [5] 37:11 43:13,18 43:21 63:3
Lakeside [1] 3:21
last [2] 68:9 69:7
law [4] 3:17,22 72:10,10
lawyers [1] 5:20
lay [2] 15:13 53:9
least [1] 54:25
leave [1] 55:4
left [1] 47:5
left-hand [1] 10:2
legal [1] 8:20
Leggett [1] 68:8
less [9] 19:20 20:2,24 22:7 23:21 25:13,16 34:13 48:20
letter [1] 72:8
lifestyle [5] 8:21 26:13 55:6 64:19,24
light [5] 51:24,25 53:21 56:19 57:2
likelihood [3] 27:1,3 56:7
likely [1] 34:15
limited [1] 22:13
line [2] 57:24 61:17
liquor [1] 21:5
list [6] 16:12 17:3,10,16 26:7 32:7 56:5
listed [1] 9:7
lists [1] 15:20
literature [6] 29:4,8 45:18 59:22 60:1,5
litigation [1] 32:8
liver [7] 33:10 51:17 53:1 56:8,13,18,22
located [1] 31:12
look [12] 30:2 35:16 36:1 36:12 39:7,13,18 45:25 51:10 58:11 61:8 62:7
looked [3] 23:14 61:19 64:23
looking [22] 9:21 10:20 16:10 17:22 30:5 33:22 33:23 34:8,23 35:9,9,23 36:11 39:8 43:9 47:24 48:10 49:18 59:22 63:9 65:20 67:6
looks [2] 12:3 13:15
low-fat [3] 19:21 20:5,7

low-risk [2] 18:23 19:14
lower [7] 17:11,14 18:12 18:13,24 19:15 20:13
lung [15] 17:25 18:15 33:18 35:9 48:11 58:8 59:7,19 60:8,24 61:9,10 61:22 62:2,11

-M-

M [1] 69:16
ma'am [1] 27:23
machine [1] 55:4
MACIEJEWSKI [1] 3:16
mail [1] 68:14
makes [2] 36:19 42:11
male [15] 8:8 9:17 14:17 30:19 31:11 68:15,17,18 68:22,23 69:12,14,14,16 69:21
males [14] 9:18 13:24 14:2,6,10 30:5,21,23 43:15,16 50:18 51:5 63:17 65:9
Marin [2] 3:5 72:2
marked [3] 2:6 65:23 69:16
married [2] 26:3,5
material [1] 61:2
materials [6] 5:13,16 6:4 6:5 8:2,18
mathematical [1] 6:9
matters [1] 66:2
MAXWELL [1] 3:16
may [11] 19:4 22:2 23:15 29:2,2 53:13,15 61:14 72:11,12,13
meals [3] 19:21 20:5,8
mean [14] 18:11 19:9 24:10,13 28:20 33:16 37:24 44:3 47:25 57:11 57:12 58:9 61:7 62:24
means [1] 41:17
measuring [1] 42:20
meats [7] 15:21 17:2 20:7 20:8,9,10,11
mechanical [1] 59:2
medical [2] 52:16 53:8
meetings [1] 26:1
memory [2] 12:4 44:17
men [1] 9:22
mentions [1] 16:11
method [2] 38:9 59:2
methodology [1] 49:13
middle [1] 10:12
might [8] 7:11 26:8 31:25 65:20 66:9,15 67:19,20
Mine [1] 54:22
minor [1] 6:8
minus [2] 41:19 47:6
minute [15] 9:24 10:7

15:9,13 21:13 29:22 33:17 36:8 42:16 46:13 51:23 54:5 55:20 64:10,10
miscellaneous [2] 25:23 26:2
mislead [2] 28:3 61:7
missing [2] 26:8 28:12
misstating [1] 35:7
mod [2] 22:17,24
moderate [7] 22:16 23:5 31:7 34:14 37:18 42:10 57:17
moderate-heavy [2] 38:6,8
moderate-to-heavy [2] 38:13,19
moment [14] 9:16 20:6 30:11 33:6 37:8 39:23 44:8 49:4,9 50:23,24 51:18 54:9 65:22
Monograph [1] 15:16
mortality [26] 8:21 17:21 17:25 18:14,25 19:13,16 22:5 26:13 27:11,15,15 28:14 29:9 34:11 35:10 35:10 37:5 38:12 40:3 45:2,9 51:8 52:4 57:9 64:24
multiplied [1] 48:23
multiply [3] 49:2,23 50:3
multiplying [1] 41:8
Myers [1] 68:9

-N-

N [1] 2:1
named [2] 71:18,19
nature [1] 69:18
NCI [1] 15:16
nearest [2] 23:24 24:6
necessarily [1] 34:1
necessary [1] 72:9
need [6] 22:25 30:2 31:25 41:22 47:8 53:10
needed [1] 9:25
needs [1] 22:22
negative [1] 27:20
neither [1] 27:18
never [44] 11:10,23,24 13:6,9,11,12 14:3,18,23 14:24 15:1 17:21,25 18:15 18:24 19:13,16 23:4,15 23:16 26:15,17 27:3 31:3 34:16 53:2,22,24 54:3,19 55:8,24 56:5,19,24 57:1,2 57:6 58:7,22 59:9 60:9,17
next [6] 19:22 21:1 22:13 27:7 50:5,6
NHIS [1] 42:18
night [2] 25:10,12
none [9] 2:6 22:15,17,24 38:5,23,23 42:10,23
none-at-all [1] 37:22

nonexercisers [1] 38:12
nonrisky [1] 17:14
nonsmoker [1] 60:16
nonsmokers [6] 13:5,10 14:18,24 54:16 59:8
nonsmoking [4] 30:4 30:15 32:24 34:7
nor [1] 71:18
North [1] 3:20
NORWOOD [1] 3:17
note [1] 5:3
nothing [3] 11:12 41:12 71:10
notice [7] 3:1 5:4,9,11,16 5:19 6:4
noticing [1] 64:11
Novato [2] 3:5 72:3
November [1] 43:6
now [24] 4:20 6:9 11:22 15:4 16:4 26:7,12 27:9 29:10 31:20 32:16,17 39:8 39:19 42:2 45:22,22 50:22 52:3 55:17 56:2 58:2 62:16 68:18
number [42] 2:2 12:9 13:20 15:10 17:5,18 21:15 21:16 26:16,18,19 27:10 28:15 31:20 38:14,25 40:14,19,24,25 41:9 44:16 48:11,20 49:2,11,16,18 50:2,3,22,24 51:4 53:21 55:12,16,19 56:2,16 60:16 60:18 64:3
numbers [24] 7:25 17:8 22:18 26:25 30:23 32:9 32:12,22 35:4 36:7 40:6 40:12 44:14 55:21 59:3 61:17 62:13 63:15 66:23 66:25 67:10,11,19 68:2

-O-

o'clock [4] 3:3 4:17,18 70:2
oaths [1] 71:5
object [28] 5:15 18:17,19 22:9 23:7 27:4,12 28:17 34:18 35:11 37:16 38:4 41:1,11 44:2 46:11 50:14 52:6 55:25 56:11 57:21 58:25 59:10 60:10,20,25 61:13 64:2
obligation [1] 53:18
observe [1] 6:8
observed [1] 52:19
obstructive [2] 33:19 62:12
obtain [1] 48:24
obtained [5] 38:1 41:7 46:5 48:18 62:18
obtaining [1] 62:16
obtuse [1] 57:11
obviously [1] 5:25
off [6] 15:6 23:24 24:3,4 35:21,22

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